

bulletin

Virginia Department of Transportation Employee Newsletter

VOLUME 70, No. 6

We've Got Big Points on the Board



We've met our goal: 60 percent of construction jobs finished on time before June 30. We've completed 97 out of 163 contracts on or before the deadline (and we're also doing well hitting our on-budget targets.) Here is an overview of developments that made our success:



Estimate



Advertise



Award

PCES

Development and agency-wide use of the Project Cost Estimating System (PCES). Going to a proven, uniform system has reduced cost estimate error from more than 200 percent for projects prior to 2002 to less than 25 percent in 2004.

Fixed Date Contracts

By shifting from calendar day to fixed date contracts all parties can focus on a specified project end date. If that date is missed, then the contract is late. With calendar day jobs, project managers had to count the number of days charged to a contract and compare that to the number of days allowed. They also had to include any time extensions added to the project. That level of complexity made it difficult to track contracts in aggregate.

Dashboard view

Upper management began taking a "big picture" approach. Before, they were getting lost in details best dealt with at the project manager level. The Dashboard, Watch List and Report Card have helped all involved to see how they contribute to the big picture.



Construct

Construction Notebook

Uniformed data warehousing and one universal query tool (Business Objects) allows Central Office and districts to get one answer with one tool. Before, many districts kept the most pertinent project tracking information offline in Excel spreadsheets or other tracking tools.



Accept

Public Reporting

Public reporting of construction progress is a strong motivator for getting a project to the final stage -- acceptance. With the Dashboard available on VDOT's Web site and regular quarterly reports that showed hard performance numbers, a more intense focus and heightened sense of purpose was promoted.

Distributed Authority

De-centralization of authority from the Central Office to the District Administrators was a change that directly impacted the program delivery focus. The new tools, such as the Watch List, enabled managers in the field to become more empowered to make the critical decisions.

Commissioner's Column

A Big Round of Applause...

Excerpts from the Commissioner's Dec. 13 videoconference:

About three or four years ago we were completing fewer than 20 percent of our projects on time by the original contract completion date....Last year, we set a goal for ourselves of 40 (percent), and ...we fell a little below the line...36 percent.

This year...we set a goal of 60 percent. So we challenged ourselves quite a bit....With a lot of hard work on behalf of a lot of people...we've completed 113 projects....(and) 97 by the original contract completion date...a tad bit shy of 86 percent.

We can't get too excited about this right now, because we still have a half year left to go...but...if you look at our total number of projects currently scheduled to be complete this year, (which) is 163, we've finished...97 of those on time...59.5 percent, pretty darn close to 60 percent!

So all of you out there in the districts, the residencies, all of you here in Richmond, can give a quiet hooray, mentally, that we have essentially met our goal, for fiscal year 2005....

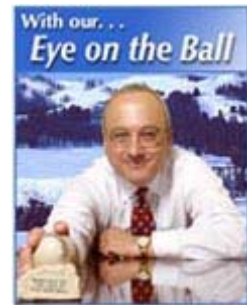
We do have about 10 more smaller projects that are going to start and need to end by the end of this year....

So I don't want us to get carried away just yet....I think there's no question that we will meet our goal for fiscal year 2005, and what I want to ask (is)...over the remainder of the year, don't take your eye off the 34 active projects that are still on time. Let's not rest from the mission we've been on....

I would like us to take a little bit of time, all of you out there on video....and in here...and let's give you a big round of applause, which is fantastic!

Philip

Philip Shucet



News Briefs

Governor proposes transportation 'jump-start'

Gov. Mark Warner has proposed to the General Assembly a budget with \$824 million to jump-start state road-building ventures with private partners, expand rail and urban transit projects and give localities more money to build their roads. The budget also includes more than \$256 million to retire debt from highway projects completed years ago and add \$147 million to finance projects already in the state's six-year master transportation plan.

The Governor also proposes \$80 million to improve transit systems, particularly in gridlocked Northern Virginia and Hampton Roads.

Eighty percent of the funding is a one-time infusion of cash—which the Governor emphasizes will not end a transportation crisis now billions of dollars short of its needs. But because some of the money is aimed at transit projects that could ease congestion in the state's most populous regions, and it could "jump-start" public-private projects, he said it may produce more benefits quicker than a greater sum of cash devoted solely to new pavement.

The initiative uses money from a projected \$1 billion state budget surplus and nearly \$230 million in federal transportation money, but requires no increases in taxes or fees.

Little of the money is for designated, state-paid projects. Rather, it creates a \$140 million revolving fund of seed money and requires investors interested in partnering with the state on a transportation project to make their case for interest-free loans of up to \$30 million. Tolls or fees retire the debt on such projects.

CTB approves transportation blueprint

The Commonwealth Transportation Board (CTB) has approved a long-range transportation plan called VTrans 2025. The plan incorporates all transportation facilities, including highway, transit, rail, air, pedestrian, port and bicycle.

“The 2025 vision for the Commonwealth is a transportation system that is safe, strategic and seamless,” Secretary Whitt Clement told the board at its November meeting. Key goals of the vision will be efficient movement of people and goods, expansion of travel choices, and interconnectivity of all transportation modes. “Before we can realize this vision, however, the state must adopt policies that ensure adequate investment in the transportation network. Currently, the gap between needs and investment is growing at a distressing rate,” the Secretary added.

According to the *VTrans 2025* report, transportation needs for all modes over the 2005-2025 period are expected to exceed \$203 billion. Best estimates of available revenues are \$95 billion, resulting in unmet needs exceeding \$108 billion.

The plan now goes to Gov. Mark Warner and the General Assembly. It is available at www.vtrans.org

First inspector trainees graduate



Photo by Tom Saunders

First to complete new inspector trainee program are (from left) Carl Ray, Paul Jackson Jr. and Charles Holloman Jr.

Three Williamsburg Residency employees are the first to complete VDOT's extensive new Inspector Trainee Program.

Carl Ray, Paul Jackson Jr. and Charles Holloman Jr. completed 29 courses and 54 on-the-job task sets. Their program also included 100 days of classroom training in addition to training in the field. Topics included surveying, bridge and road inspections, demolition of buildings, preservation of grave sites, environmental regulations and much more.

It's a daunting task" to complete the program, according to William Beuter, VDOT construction training manager. This is the department's first state-wide inspector training program. About 35 trainees are now enrolled. Upon graduation, students become full-fledged construction inspectors.

The Bulletin turns 70!

VDOT Bulletin celebrated 70 years of publication in November. The first edition of the Virginia Highway Bulletin was printed in November 1934. It was mimeographed with lots of stenciled headlines and illustrations. The editor was H. J. Neale, landscape engineer, who collected news from employees reporting to him from across the state. In an editorial he wrote that the Bulletin would be "the voice of a Highway department that I claim is second to none in the United States." The first edition was dedicated to Highway Commissioner Henry G. Shirley, who assumed leadership of Virginia's highway affairs in 1922.

Through the decades, the Bulletin has had many formats, sizes, and emphases. But it has always been dedicated to presenting the progress of the department and news about the employees who make the department successful.



Garrett Moore

Staunton District administrator chosen

Garrett W. Moore has been named administrator of the Staunton District. Moore has served as resident engineer in the Warrenton Residency since April 2003.

Moore will oversee VDOT's responsibilities in 11 counties of the Shenandoah Valley. He also will represent the agency to motorists, local governments and the business community and will work with the Winchester-Frederick and Harrisonburg-Rockingham metropolitan planning organizations. He begins his new job Jan.10.

Moore began his career with VDOT in 1999 as an assistant resident engineer in the Fredericksburg Residency. During his work with the agency, he has been responsible for a variety of construction and maintenance projects on interstate, primary and secondary roads.

His first career was as an officer in the U.S. Marine Corps from which he retired as a lieutenant colonel. In the service, he helped plan, build and maintain roads, airfields and other components of military and civilian infrastructure. In one assignment he coordinated new construction and maintenance of 60 miles of road and support facilities for 80,000 people in an undeveloped desert environment.

Moore is a licensed professional engineer with two civil engineering degrees, a bachelor's from the University of California, Berkeley, and a master's from Virginia Tech.

Goad named RE in Wytheville



Junior Goad

Junior H. Goad is the new Wytheville resident engineer, succeeding Mike Russell who is now location and design engineer in Salem District. Goad moves from Hillsville where he has been resident engineer for 13 years.

Goad, a 32-year veteran of the department, earlier held the position of assistant resident engineer in Hillsville and engineer trainee in Fairfax and the Central Office. In 2003, he served simultaneously for four months as resident engineer in both Wytheville and Hillsville. Bristol District Administrator Jim Givens commented, "His familiarity with Wythe and Grayson counties is a plus, as well as his knowledge of rural transportation challenges in the mountains of Southwest Virginia."

Goad will oversee maintenance and construction activities on over 1,300 miles in the two counties. A licensed professional engineer with a civil engineering degree from Virginia Tech, Goad is a native of Carroll County. He and his wife Carol have one son, John Mark, a second-year medical school student.

Mitchell directs Programming Division



Diane Mitchell

Diane L. Mitchell has been named director of the Programming Division, succeeding Charlie Rasnick who is retiring. Mitchell has been assistant division administrator in the Transportation and Mobility Planning Division, and before that the Transportation Planning Division, for almost four years. She has had oversight for the division's administrative, financial, contracting and planning activities.

A VDOT employee for 16 years, Mitchell began her career with VDOT after a short stint in the Fairfax County Office of Transportation, joining the Transportation Planning Division in 1988 as a highway traffic technician. Later, she held positions as a data analyst, transportation engineer, engineer senior and engineer program supervisor in the division.

As assistant director, she led the reorganization of the division, developed and managed the division's strategic plan and guided the unit's legislative activities at the local, state and federal levels. A graduate of the College of William and Mary with a bachelor's degree in mathematics, Mitchell is a native of Richmond.

Thacker leads Louisa Residency



G. Milton Thacker

G. Milton Thacker continues a 35-year career with the department with a promotion to resident engineer in Louisa.

A native of Mineral, Thacker was an assistant resident engineer in the Appomattox Residency for the past three years, overseeing all construction and maintenance activities in Appomattox and Campbell counties. Earlier, he served for seven years as the assistant resident engineer in the Warrenton Residency with responsibility for construction and maintenance programs in

Fauquier and Rappahannock counties. Before that, he was at the Culpeper District Office assisting with the maintenance program for four years.

He joined VDOT in 1969 as an inspector trainee on the I-64 project in Louisa, moving up to superintendent of the Cuckoo Area Headquarters, a position he held for 12 years.

He is a lifetime member of the Louisa County Rescue Squad and former member, president and fire chief of the Mineral Volunteer Fire Department. Thacker, his wife Judy, and children reside in Buckingham County.



Marsha Fiol

Fiol named TMPD administrator

Marsha Fiol has been named administrator of the Transportation and Mobility Planning Division (TMPD). She moves up from an assistant administrator's position in the division.

Earlier, Fiol was state transportation planner, assistant state transportation planning engineer, section manager for statewide planning and engineer. She has 15 years of experience with VDOT in the Richmond District and the Central Office. She has worked in the former Traffic Engineering and Secondary Roads divisions, as well as the TMPD.

She earned a bachelor's degree in business administration from Austin Peay State University and a master's degree in transportation policy, operations and logistics from George Mason University. She is chairman of the Virginia Transportation Planning Research Advisory Committee. She is married with two children.



Keith Martin

Martin heads Policy Division

Keith M. Martin moves from the Department of Motor Vehicles (DMV) to become administrator of VDOT's Policy Division. Martin had been director of legal and regulatory affairs at the DMV since 1999. In that role he identified and resolved legal issues with significant policy implications and coordinated the agency's legislative resources.

For three years, during his employment at DMV, Martin was chair of the Region II Legal and Policy Services Committee for the American Association of Motor Vehicle Administrators. Earlier, he was special assistant to the secretary of health and human resources, advising the secretary on health-related and public policy issues. Before that he was a Virginia Governor's

Fellow in the Department of Planning and Budget where he reviewed and analyzed state regulations.

He holds a bachelor's degree in history and a master's degree in public administration from Virginia Tech and a law degree from Thomas M. Cooley Law School. He is a member of the Virginia State Bar and the American Society for Public Administration.

Pass it on!

That's what two senior inspectors did, and their sons have caught on quickly

Never doubt the power of a good example, especially when it's working in the lives of a new generation of VDOTers whose parents have worked diligently for the department. Aptitudes, values and appreciations get transmitted down.

Lessons in highway work were part of the upbringing for Charles Holloman Jr. and Paul Jackson Jr., construction inspectors in Williamsburg Residency, whose fathers have been doing the same work in Hampton Roads District for a much longer time.

The junior Holloman remembers those times his father took him as a boy to VDOT work sites. "It was cool to go up on some bridge, or some flyover on I-264, and check it out." He recalls his father's instinct as "a knack for looking at any project around the house and seeing, without a ruler, that it was off a half an inch." No doubt these instincts were being passed on.



Paul Jackson Sr. and Jr. (top) and Charles Holloman Sr. and Jr. are building a family legacy of VDOT construction inspection.

VDOTer in Profile

Last month Holloman was finishing up a project on Shoe Lane (Route 60) in Newport News, which he described as an “awesome” experience for him. After working for a contractor as an asphalt and concrete finisher, Charles Jr. knew he liked construction, and he was ready for an inspector trainee’s job when it came open.

The younger Jackson, known as “P.J.,” remembers his father driving an orange truck to VDOT projects, and sometimes getting to go with him. Highway construction projects intrigued him when he saw them at his father’s side. He also worked for a contractor before his VDOT career, but after crawling through simmering attics and freezing basements to install heating and cooling equipment, he was ready for another job. He’s happy it is with VDOT.

“You’re always doing something different,” says P.J. It might be inspecting a bridge, a grade, a pavement, an environmental feature, traffic safety or something else. Not being “stuck indoors” is a big plus. Environmental enforcement and traffic safety are his two assignments on the Mercury Boulevard project in Hampton.

“Charlie” Holloman Sr., a Norfolk Residency inspector, is concentrating on the Route 17 project beginning at the North Carolina line. He remembers well his days as a novice inspector, when he had “a really good inspector senior to show us how to do it.” The senior Jackson is currently assigned by the Williamsburg Residency as records keeper for the Mercury Boulevard project in Hampton, a consuming job matching up contractors’ job slips and inspectors’ journals to see when contractors should be paid.

All in the Family

Several VDOT work units have prepared holiday and Christmas packages for troops fighting for us overseas. Here are some reports:



National Guardsman Horace Culpeper in Afghanistan.

To make the holidays merrier for those serving in Iraq, the Fredericksburg District human resources staff got together after work and shopped for a variety of items, from Chapstick to Chips Ahoy. “They wrapped in excess of 200 packages, some small, some large, but *all* containing very special thoughts and prayers. These were shipped to a Virginia Unit of The National Guard, 276th Engineering Battalion. Some members are Fredericksburg VDOTers. In a figurative way, Virginia roads stretch all the way to The Middle East!” says Karl Larson, human resources manager.

Northern Virginia’s Materials Section also is supporting “one of our own.” Horace Culpeper, a concrete technician in the section, is serving in Afghanistan with the National Guard’s 116th Infantry Division. “We have been sending him regular care packages of donated items as well as good wishes. He has had some interesting adventures to say the least – very scary place!” his VDOT coworkers report. Meanwhile, the district’s Equipment and Facilities Section are collecting everything from sunscreen to beef jerky for Eric Woznick and Pete Murga who are serving in Iraq.

Woznick is shop supervisor at the Fairfax (C-30) repair shop and Murga is an equipment repair technician at the Van Dorn repair shop. The L&D Section is collecting an even wider range of articles for Clay Coatney, engineering tech III with the district survey team in Leesburg Residency. Major Coatney is serving in an artillery battalion in Iraq. He also will be receiving quite a variety of items, including yo-yos, cigars and John Wayne DVDs.

With the support of its Executive Team, employees across the Lynchburg District have collected donations for members of the 4th Marine Division in Iraq. They are filling shoeboxes with those items so easily bought here but hard to get “over there.” They will be shipped with assistance from the local Marine Corps League and other organizations.

John Watson, assistant resident engineer, Lebanon Residency, coordinated collection of items for his former unit, the 276th Engineering Battalion, Virginia National Guard, now serving in Mosul, Iraq. The unit’s stateside base is Richlands-Claypool Hill. Six large packages, with everything from personal hygiene products to American flags and phone cards, are on their way to the troops.



Naval reservists Eric Woznick (left) and Pete Murga are construction mechanics serving in Iraq.

Central Office



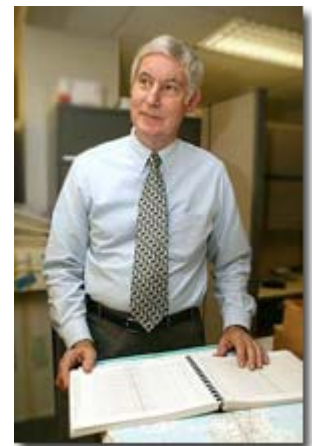
Photos by Dot VanMetre

Get your "Attitude Virus" antidote! That was the theme of the annual National Customer Service Week program sponsored by the Information Technology Applications and Operations divisions in Central Office. Handing out the antidote in the left photo are Linda Bergman (left) and Susan McCoy, and in the right photo Linda McKay (left) and Donna Ornduff. Employees passed through a "Bio-Containment" area and watched a video that diagnosed a variety of attitude viruses that could make you unpopular with customers or fellow workers.

Mobility Management Division: Garland Campbell, who began work for the department in 1952 and who served as a highway traffic count specialist for more than four decades, retired Oct. 31, this time completely. Campbell started in Amherst Residency as a stock clerk and transferred to the Traffic and Planning Division in 1959, moving to the Central Office in 1963.

Since then he has been immersed in developing statewide traffic statistics. While he retired as a transportation engineer in 1998, he continued working, often several days per week, processing traffic stats needed by VDOT engineers and others outside the department. He has witnessed huge changes in the motoring picture in Virginia. In 1963, when he began analyzing traffic, the average daily vehicle miles traveled (VMTs) totaled 30 million. In 2003, that total was 210 million. Thanks, and best wishes, Mr. Campbell!

Right of Way and Utilities Division: Tim Butler, appraisal system analyst, was recognized recently in Chicago as the "2004 Outstanding Associate Member" by the Appraisal Institute, an 18,000-member nation-wide organization. Butler was honored for developing a career path and core curriculum for courses for VDOT employees as well as an appraisal software program. VDOT chief appraiser Michael McCall said Butler's work "has been extraordinary and benefited both VDOT and the Appraisal Institute."



Garland Campbell

Culpeper District

District Office: Crystal Hale, inventory analyst in the Accounting Section, has been named manager of a new section that will oversee a contract with a private company, Mancon, which will supply equipment, parts and commodities to the district. She will also supervise the inventory management system.

Fredericksburg District

Bowling Green Residency: Congratulations to Susan Gardner who has been promoted to residency contract administrator.

Hampton Roads

Accomac Residency: Sam Miles has been promoted to transportation operations manager II for the Eastville AHQ. Joe Boggs has been promoted to transportation operations manager I at the Accomac AHQ.

District Office: Best wishes to Nicole Chapman, formerly with the district IT team and now working for VITA at the district, who was married on Oct. 30 to Johnny Dale at a Halloween wedding where costumes were mandatory!

Lynchburg District

Amherst Residency: Phyllis Thompson has been promoted to maintenance supervisor at the Madison Heights AHQ. Thompson joined VDOT in 1988 as an hourly operator at the Bryant AHQ. Greg Tomlin is the new maintenance supervisor at the Shipman AHQ. He began working at VDOT in 2001 as an equipment operator and later as a construction inspector.

District Complex: For the second consecutive year, the Lynchburg District has been the winner of "A Challenge to the VDOT Districts: Best Implementation of Tree-Trimming Policy" from Scenic Virginia Inc. T. A. Wiles IV, district maintenance engineer, Ray Lacy, roadside development manager, and William E. Lewis, environmental contract administrator, accepted the award at a reception held at the Kent-Valentine House in Richmond.

Rick Youngblood has been promoted from district asset data collection manager to assistant planner for the district. He will help develop a transportation planning program for the district's 10 counties and two metropolitan planning organizations.

Northern Virginia District

District Office: Best wishes to Jennifer Finstein, public affairs coordinator, on her marriage Nov. 6 to Robert Neal DeAngelis Jr. The ceremony was held at the Women In Military Service For America Memorial located at the ceremonial entrance to Arlington National Cemetery. They honeymooned in Hawaii.

Richmond District

District Office: Charles W. Gardner and Sabrina R. Tarbell have been promoted from engineering technician III to architect-engineer I in the L&D section.

South Hill Residency: Ginny and Robert Keesee are the proud parents of a baby daughter, Ashley Nichole, born Oct. 18. Ginny is contract administrator for the residency.

Salem District

Bedford Residency: Debbie Shinstine, P.E., is a new assistant resident engineer. She most recently owned a consulting firm in Arizona specializing in commercial site development.

District Office: Welcome to Michael A. Russell, P.E, who was recently named location and design engineer for Salem District. He had been resident engineer in Wytheville.

Rocky Mount Residency: Tony Handy, P.E., has joined the residency as assistant resident engineer. He transfers from the Williamsburg Residency.

Staunton District

District Office: Jerry VanLear, Verona resident engineer, has been named urban program engineer for the district. He will continue as resident engineer until that position is filled. In his new post, VanLear will represent the interests of assigned jurisdictions in VDOT's planning, preliminary engineering, construction and administrative processes. Ben Lineberry Jr. has been promoted from assistant resident engineer at Edinburg to a professional engineer position at the district office, where he will manage construction programs in Edinburg, Luray, and Harrisonburg residencies. In other news, for the fifth consecutive year, the district's payment of its bills was noted as the most prompt in the agency.

Retirements

KENNETH E. ANDERSON,Transportation Operator II, Salem Residency, 27 Years

EUGENE BARTON,Transportation Operator II, Amelia Hill Residency, 35 Years

C C. BURGESS,Transport Opertns Manager II, Warsaw Residency, 38 Years

BARBARA J. COOPER,Security Officer III, Hampton Roads Bridge, 10 Years

JAMES L. COOPER,Trades Technician III, Hampton Roads Bridge, 3 Years

DONALD E. DRUMMOND,Transportation Operator II, Salem Residency, 25 Years

L. A. GENTRY,Engineering Technician III, Fred'burg District Office, 44 Years

KENNETH R. GURLEY,Engineering Technician II, Chesterfield Residency, 29 Years

C M. LAWSON, Engineering Technician IV, Halifax Residency, 41 Years

DONALD J. LOCKARD, Engineering Technician IV, Williamsburg Residency, 26 Years

EDWARD T. LUCK,Transportation Operator II, Ashland Residency, 30 Years

ROBERT L. MARSHALL JR,Transport Opertns Manager II, Verona Residency, 39 Years

LARRY D. MAUZY,Transportation Operator II, Staunton District Office, 30 Years

R. F. SHIFFLETT,Transportation Operator I, Fairfax Residency, 35 Years

SHELDON D. STUPAR,Security Officer III, I-664 / Monitor Merrimac Memorial Bridge Tunnel, 19 Years

CLIFTON F. TURNER JR,Arch/Engring Mgr I, Richmond District Office, 43 Years

JOHN H. WILLIAMS,Arch/Engring Mgr I, Richmond District Office, 39 Years

Obituaries

Perry E. Armentrout, 77, foreman, Edinburg Residency, died Sept. 2; retired in 1982 with 5 years of service.

Carl R. Funk, 78, rest area custodian, Edinburg Residency, died Sept. 9; retired in 1990 with 20 years of service.

James L. Hall, 47, transportation operator II, Appomattox Residency, died Nov. 24. He had 28 years of service.

Sherman Harper, 93, maintenance helper, Dillwyn Residency, died Oct. 29; retired in 1976 with 30 years of service.

Richard Dare Hawley, 87, right of way coordinator in Central Office and right of way agent in Hampton Roads District, died

Nov. 20; retired in 1980.

Ben B. Lewis, 85, maintenance supervisor, Chatham Residency, died Oct. 1; retired in 1981 with 33 years of service.

Carroll Maynard Gwaltney, 66, maintenance operations manager, Waverly Residency, died Oct. 24; retired in 2000 with 36 years of service.

Julian O. Mays, 84, residency engr. clerk, Dillwyn Residency, died Nov. 28; retired in 1985 with 19 years of service.

Carl L. Miller, 70, equipment operator B, Dillwyn Residency, died Oct. 20; retired in 1995 with 31 years of service.

VDOT's challenge: Improve travel

By Connie Sorrell, chief of system operations

20 million trips a day

That's the number of times people somewhere in the Commonwealth get in their cars or trucks and go from point A to point B every 24 hours. Today, transportation in its many forms has become like air and water – vital to sustaining our lives. And like air and water, it is a finite resource.



Connie Sorrell

We have built the nation's roadways. Now our mission is to create a communication infrastructure to manage traffic flow and traveler information to improve the system's capacity to move people and goods. Travelers, armed with their cell phones, PDAs, laptops, Internet, in-vehicle systems, radio and television want real time travel information. They want reliable travel times, reduced delay and improved safety.

At DOTs around the country, asphalt-based construction is giving way to system operations. Maintaining the roads we have is paramount to easing congestion and improving traffic flow. But operations do not stop with just road maintenance.

Between 1982 and 2002, the Texas Transportation Institute has calculated the average annual delay for the average person in peak periods in the 85 metropolitan areas studied climbed from 16 hours of delay to 46 hours of delay. Forty-five to 50 percent of all delay is because of non-recurrent congestion. That means breakdowns, crashes, work zones, weather, and poor traffic light timing cause almost half of the congestion that exists. These are the situations we can dramatically improve if we put in place the right programs and tools to manage them.

At VDOT, the model for this new system will be made up of the following programs and tools: snow and ice management, asset management, HOV lanes, construction and maintenance work zone operations, traveler services and information (like 511), traffic update information, traffic signal optimization, arterial street access management, Safety Service Patrols, Smart Traffic Center Operations, partnerships with emergency responder agencies.

The foundation of improving travel has two components. First, we must have a well-maintained infrastructure that provides a safe and comfortable trip. This is the foundation to being able to provide the second component, improved capacity. Improving the use of the system means that we have to employ more of our efforts on the types of activities listed above and find more tools to add to that list.

We must find the most cost-effective and expedient way to gather system performance information, improve that performance and effectively communicate it to travelers and other customers. Improved information along with improved system performance will empower people to make better travel decisions about routes and modes. We have a new core business to maximize the capacity of what we have built and maintained to move people and goods. It's not just about cars on the road anymore, it is about moving people and freight in the best manner possible – seamlessly from one mode to the other.

Transportation data in the hands of the traveler does make a difference. According to research done by The Texas Transportation Institute on congestion between 1982 and 2002, 335 million hours of delay were avoided where operational treatments were applied.

The quality of information is as important as the quantity of data gathered. Knowing that 4,000 vehicles pass on one lane in one hour is not as good as knowing 4,000 vehicles traveling at 20 mph in a 45 mph zone in one hour have a travel delay on the same route of an hour between A Street and B Street. We must measure congestion and delay and incident time length and measure our efforts to improve performance. Above all else, travelers and other customers are demanding accurate and timely travel time information.

Our core system operations business will incorporate three things:

- Asset management – knowing precisely what we own and how often it is to be maintained; and budgeting for that maintenance while identifying unfunded needs.
- Championing the cause – touting the benefits of systems operations and focusing on a statewide effort for improved safety, security and mobility.
- Smart technology decisions – deploying scalable and maintainable technology to monitor road conditions, improve incident response and timely information dissemination.

While we have had a number of very visible and successful initiatives VDOT needs a long-range, comprehensive

coordinated plan for system operations. As the new chief of system operations, my first assignment is to create a business plan. It will provide the mission, goals and framework for what system operations will mean at VDOT, what programs and services will have priority and how they will be aligned and funded.

A 21st century environment calls for a different vision for transportation, one based on better information to make more informed choices about modes of travel, times of travel and route choices. Our changing environment also calls on us to manage our responsibilities with a comprehensive, well-coordinated and appropriately resourced, business plan. The challenge ahead is one that will be met when congestion impacts will be mitigated through a variety of strategies including giving motorists information about delays so they can make more informed choices about how and when to travel. In that vision, Virginia motorists on their 20 million daily trips will enjoy safer travel and less stress.

Best Practices for snow removal this season: More Smarts, Less Salt

VDOT has been fine-tuning its snow and ice operations in the past two years. Here is the story behind the progress.

Problem: Maintenance budgets have been stretched in recent years. Weather events especially have tried to drain these budgets. This year a dramatic increase in the price of salt has threatened the budget. Previously, salt was purchased at \$35 per ton, the price is expected to double to between \$60 and \$70 per ton in 2005. Consequently, the Asset Management Division has looked intensely at cost-cutting measures in snow and ice removal.

Assessment: Long-standing patterns of snow removal were scrutinized two snow seasons ago, and maintenance managers began seeing new opportunities to save money. They also gained new ideas from an annual four-state meeting of DOTs on snow removal. Consequently, a number of changes were implemented last winter. As a result, snow removal costs dropped dramatically from FY 2003 to FY 2004. Some of that reduction was due to fewer events, but the “per-event” costs were reduced significantly as well—in the neighborhood of \$60 million (see figures below).

Solution: The new approaches employed last winter were considered so successful that they will be followed again in the coming winter. They include the following actions:

- Reducing the use of “hired equipment,” or snow-removal equipment operated by private vendors. Hired equipment will be used, but only when managers are certain it is needed.
- Emphasizing the correct calibration of chemical-dispensing equipment, particularly in the “dry runs” held every fall to inspect and test equipment. Additional training, if needed, will be given to ensure correct spreader calibrations.
- Using “skeleton crews” for initial clearing snow and ice, thereby saving money in most instances. Skeleton crews (typically three employees for each area headquarters) will in some cases eliminate the use of a full overnight crew.
- Relying on weather forecasting equipment so that managers know more precisely when to call in crews. Smart Traffic Centers also will alert field units in their districts of the onset of a snow event.
- VDOT equipment will be used as often as possible during normal work hours to clean secondary roads after precipitation has stopped and temperatures are more favorable to clearing.

Outlook: Implementation of policies already proven for their effectiveness is expected to result in another snow season met with lower costs and more efficiency—and perhaps with minimal acquisition of salt while the price is so high.



Photo by Trevor Wrayton

Rick Salmon (background) and Steve Crawley, crew members at Oilville AHQ in Ashland District, calibrate the amount of liquid chloride being dispensed by a new spraying attachment.

Comparisons	FY04	FY03
Snow removal costs statewide	\$84 million	\$144 million
Number of snow events	111	134
Cost per snow event	\$745,159	\$1,047,331
Hiring equipment costs per event	\$191,380	\$375,852

Tech-Bytes

Signal technicians are inter-connected

Salem, this is Hampton Roads. Fix my lights please!

*VDOT's **Knights of Light**--VDOT traffic signal technicians-- continue to charge hard. They've accomplished much around their "round table," the statewide association they formed for sharing problems and technical solutions. Here's what they've done lately in their jousts with mounting traffic volumes.*



Managing traffic with more technology and fewer new traffic lanes is a continuing transportation objective. It fits into the broad business referred to as systems operations, a major VDOT priority. A big player in improved operations is traffic signal technology, which VDOT technicians are using across the state to move more vehicles in less time. Interconnectivity is a growing aspect of signalization.

Five districts—Bristol, Hampton Roads, Richmond, Salem and Staunton—now have software that is inter-connective. That provides big potential for the Knights of Light to manage traffic while watching a traffic picture much bigger than the one in just their district. Consequently, they are aware of waves of traffic approaching their district, and they have a head start on changing signal patterns to accommodate them. Technicians also communicate with their counterparts in other districts to move traffic efficiently through adjoining districts. That's not all.

"We can even reach across our district boundary into another district and re-program signals to make traffic better," reports Bobby Perdue, Salem signal technician supervisor and chairman of the Knights. Consequently, the Knights can collaborate on managing traffic flowing into or out of NASCAR races in Bristol and Martinsville or ballgames in Blacksburg—heavy traffic affecting much of the I-81 corridor. "Now we can handle events like this regionally and not just locally," Perdue adds.

They also can jump across the state, via their software, to help a fellow technician struggling with a traffic surge.

The first incidence of this came during Hurricane Isabelle. Todd Morrison and his signal team in Hampton Roads were focused on traffic evacuating ahead of the storm, particularly on routes 60, 58 and 17 and other corridors parallel to I-64. He also had two five-mile backups—which his small crew couldn't handle—on Route 460 in the area of Wakefield and Waverly. Signal times were not set to handle the building exodus.

Morrison called Perdue in Salem to say, "Help!" And Perdue, making good use of their interconnectivity, went to work on the problem. By watching a dynamic display on his computer, which showed vehicles crossing detectors in pavements on Route 460, he retimed the signals 200 miles away. Within 20 minutes--at the cost of eight long-distance phone connections for his computer--Perdue had cleared the traffic stoppages.

How is this intervention accomplished? By using a uniform software platform acquired by the districts two years ago and by sharing data banks on signalized intersections. This shared information includes programs for signal timing, systems for coordinating signals, and reports on traffic counts. In the past year signal technicians have begun sharing this data when appropriate, using it to make signal adjustments at home or to support each other from afar--all in a matter of seconds. – **by Chuck Armstrong**

The Knights of Lights are:

- Jim Hutton and Steve Forrester – Bristol
- Terry Kiser – Staunton
- Don Blankenship and Bob Sheehan – Northern Virginia
- Mickey Bellon – Culpeper
- Tony Burnette and Tim Smith – Lynchburg
- Mike Goodman – Richmond
- Shawn Beavon – Fredericksburg
- Todd Morrison – Hampton Roads
- Mike Winn and Mansour Mahban – Mobility Management Division
- Bobby Perdue – Salem

Statewide Equipment Skills Challenge Event Champions

Congratulations to the **champions** of the 17th Annual Statewide Skills Challenge!



Impressive trophies are on display
when competitors arrive in Richmond.

Restart

Truck (individual):

Edwin Lester Wilson, Hampton Roads District

Backhoe (individual):

S. Kent Shelton, Lynchburg District

Loader (individual)

David R. Brightwell, Lynchburg District

Truck (team):

Ronnie Earles and Ronald Sowers, Salem District

Backhoe (team):

Jeff Hart and Ted Boyer, Bristol District

Loader (team):

Justin Neal and O.J. Lawler, Northern Virginia District

bulletin

The Bulletin is published bi-monthly, online at **www.VirginiaDOT.org** for active employees and in print for retirees. Send correspondence to: Editor, Public Affairs Office, VDOT, 1401 E. Broad Street, Richmond, VA 23219
Telephone: (804) 786-4243

Commissioner: Philip A. Shucet

Public Affairs Director: Lynda South

Editor: Charles M. Armstrong

Web Coordination: Cynthia Brown, Greg Brown

Art Director: Liz Liverman

Photo Coordination: Tom Saunders

Video Coordination: Lenny Tierney

Contributing Writer: Sande Snead

PRESORTED
STANDARD
U.S. POSTAGE
RICHMOND, VA
PERMIT NO. 1347

Virginia Department of Transportation
Richmond, VA 23219
Forwarding and Return Postage Guaranteed
ADDRESS SERVICE REQUESTED